IN THE CLAIMS

1. (Currently Amended) A method for the production and allocation of nucleic acids and the polypeptides coded by these, comprising the following steps: a) the compartmentalisation of nucleic acids together with an in vitro transcription-translation mixture in a water-in-oil emulsion, b) the in vitro expression of ~~the~~ fusion polypeptides coded by said nucleic acids in the microcompartments of the water-in-oil emulsion, whereby each nucleic acid is bonded to the fusion polypeptide it codes for, wherein each of the fusion polypeptides comprises at least one constant peptide part I and at least one variable peptide part II, and wherein the fusion polypeptides are covalently bonded to the nucleic acid coding for said fusion polypeptide in step b), and wherein the number of the fusion polypeptides per nucleic acid bonded in this manner is a definable integer.

2. (Original) The method according to claim 1, wherein the method additionally comprises the following step: c) the extraction of the fusion polypeptide-nucleic acid complexes prepared in step b) from the water-in-oil emulsion.

3. (Previously Presented) The method according to claim 1, wherein the method additionally comprises the following step: d) the selection of fusion polypeptide-nucleic acid complexes with desired properties.

4. (Previously Presented) The method according to claim 1, wherein the method additionally comprises the following step: e) the amplification of the selected nucleic acid molecule.

5. (Previously Presented) The method according to claim 1, wherein the method additionally comprises the following step: f) the random or directed mutation of one or more nucleotide(s) during or after the amplification of step e).

6. (Previously Presented) The method according to claim 1, wherein the method additionally

comprises the following step: g) the repetition of one of the methods described in claims 1 to 5 once or several times.

7. (Previously Presented) The method according to claim 1, wherein the nucleic acids are rRNA, mRNA or DNA.

8. (Previously Presented) The method according to claim 1, wherein the nucleic acid is DNA.

9. (Previously Presented) The method according to claim 1, wherein the nucleic acids are double-stranded DNA, preferably double-stranded linear DNA.

10. (Previously Presented) The method according to claim 1, wherein the nucleic acids are chemically modified DNA.

11. (Previously Presented) The method according to claim 1, wherein each microcompartment of the water-in-oil emulsion does not comprise more than one nucleic acid.

12. (Previously Presented) The method according to claim 1, wherein the microcompartments prepared in the water-in-oil emulsion have an average diameter of 1 μm to 2 μm.

13. (Previously Presented) The method according to claim 1, wherein one peptide part I is covalently bonded to one nucleic acid molecule each.

14. (Previously Presented) The method according to claim 1, wherein the constant peptide part I of the fusion polypeptide is a (cytosine-5-)-methyl transferase.

15. (Original) The method according to claim 14, wherein the methyl transferase is selected from the group consisting of M.Hae III, M.Hha I, M.Hpa I, M.Msp I and Alu I.

16. (Original) The method according to claim 15, wherein the methyl transferase is Hae III methyl transferase from haemophilus aegypticus.

17. (Currently Amended) The method according to claim [[16]] 10, wherein the modified nucleic acid comprises the sequence 5'-GGFC-3' and F is 5-fluorodeoxycytidine.

18-19. (Cancelled)